# **County of Loudoun**

# **Department of Planning**

#### **MEMORANDUM**

DATE:

June 4, 2009

TO:

Loudoun County Planning Commission

FROM:

Stephen Gardner, Project Manager

SUBJECT:

June 11, 2009 Work Session

NIVO Substation; SPEX 2008-0044 & CMPT 2008-0015

# **BACKGROUND:**

The Planning Commission held a public hearing on this application on May 21, 2009. Five members of the public addressed the Commission. The first speaker addressed the proposed location of temporary structures for TruGreen Lawn Care and clarified the buffering required for the use. The second speaker spoke in favor of the application and indicated concerns related to aesthetics and safety had been addressed by the Applicant. The third speaker identified concerns with the visual impact of the TruGreen Lawn Care temporary structures and ultimate by-right uses that may occupy the property. The fourth speaker requested additional discussion and detail regarding proposed screening and the height of the proposed retaining wall fronting Smith Switch Road. The final speaker spoke in favor of the application and noted the utility substation was located in such a way that views would be blocked by a future building on the site. Comments from the Planning Commission included requests that the Applicant, in conjunction with the property owner, meet with members of Cameron Chase community to discuss proposed landscaping and buffering, additional photo simulations illustrating the view from nearby residences be submitted, and a graphic illustrating approved and proposed land uses in the general vicinity of the site be prepared. After discussion, the Commission voted 9-0 to forward the application to Work Session for further discussion.

#### **STAFF RECOMMENDATION:**

Staff can recommend approval of these applications, subject to the recommended Special Exception Conditions of Approval which minimize impacts to neighboring properties. Staff notes that the Special Exception Plat has been revised to clarify the height of the screening wall at specific locations; the Conditions of Approval have been updated to reflect the revised plat. No other changes to the application have been made. In response to the Commission requests noted above, a graphic detailing approved land use applications in the area has been included as Attachment #4. Negotiations regarding buffering and landscaping are on-going between the Applicant,

June 11, 2009

property owner, and residents of Cameron Chase and are summarized in a memorandum included as Attachment #5. Photo simulations will reflect the outcome of these deliberations and will be provided at the Work Session.

### **SUGGESTED MOTION:**

1a. I move that the Planning Commission approve CMPT 2008-0015, NIVO Substation, subject to the "SPECIAL EXCEPTION / COMMISSION PERMIT PROPOSED NIVO SUBSTATION LOUDOUN COUNTY, VIRGINIA" Plat dated November 12, 2008, revised through June 3, 2009, prepared by Dominion, and with the attached Findings, and forward the application to the Board of Supervisors for ratification.

AND.

1b. I move that the Planning Commission forward SPEX 2008-0044, NIVO Substation, to the Board of Supervisors with a recommendation of approval, subject to the Conditions of Approval dated June 4, 2009 and based on the attached Findings for approval.

OR.

2. I move that the Planning Commission forward CMPT 2008-0015 and SPEX 2008-0044, NIVO Substation, to a Planning Commission Work Session for further discussion. (Staff notes that the critical action date for the Commission Permit has been extended by the Board to June 29, 2009)

# **ATTACHMENTS:**

- 1. Vicinity Map
- 2. Findings for Approval
- 3. SPEX Conditions of Approval; dated June 4, 2009
- 4. Graphic detailing Approved and Proposed Land Uses
- 5. Applicant Memorandum; dated June 3, 2009
- 6. State Corporation Commission Final Order
- 7. Special Exception Plat; dated November 12, 2009; revised to June 3, 2009

# **VICINITY MAP**



#### **Directions:**

From Leesburg, take Route 7 east to Loudoun County Parkway. Follow Loudoun County Parkway south to Gloucester Parkway. Turn right onto Gloucester Parkway. Follow Gloucester Parkway west to Smith Switch Road. Turn left onto Smith Switch Road. The subject property will be on the left, approximately one-quarter mile past the W&OD Trail.

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# FINDINGS FOR APPROVAL

- 1. The Application is in conformance with the policy guidance of the <u>Revised General Plan</u> which states the County supports the timely delivery of gas, electrical, and communication services to businesses and households.
- 2. The utility substation will provide the infrastructure to facilitate expansion of data center uses within the Beaumeade Corporate Park and the Ashburn Corporate Park, enhancing the County tax base and providing employment opportunities.
- 3. The Application is consistent with the <u>1972 Zoning Ordinance</u>.

Attachment 2

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# **CONDITIONS OF APPROVAL – June 4, 2009**

- 2. Landscaping The Applicant shall install a Type 4 Buffer along the perimeter of the compound outside of the "PROPOSED SUBSTATION WALL" as identified on the Plans. The number and type of plantings along the north, south, and east boundaries of the compound shall be consistent with that required for a "Side/Rear" Buffer Yard as noted in Section 5-1414(B) of the Revised 1993 Zoning Ordinance. The number and type of plantings along the western boundary of the compound shall be consistent with that required for a "Front" Buffer Yard as noted in Section 5-1414(B) of the Revised 1993 Zoning Ordinance but shall be enhanced to include a minimum of six (6) evergreen trees per one hundred lineal feet. The six (6) evergreen trees shall be in addition to the other plantings required as part of the "Front" Buffer Yard as noted above. A minimum of seventy-five (75) percent of landscaping shall consist of native or nativar species. All landscaping shall be maintained in good condition. Any diseased or dying trees and/or shrubs shall be replaced. Any landscaping removed to accommodate the "Distribution Easements" shall be replaced with plantings of a like kind in the vicinity of said plantings removed.
- 3. Compound Wall The "PROPOSED SUBSTATION WALL" as noted on the Plans shall be constructed in substantial conformance with the profile included on Sheet 1 of 6 entitled "SCREENING WALL DETAIL" and the profiles included on Sheet 6 of 6 entitled "ELEVATION SCREENING WALL," "PLAN SCREENING WALL," "DETAILS SUPERIOR LEDGESTONE PANEL AND CAP," and "SECTION SCREENING WALL." The wall shall include a variable height up to twenty-seven (27) feet but shall maintain a minimum height of twelve (12) feet. Wall heights shall be consistent with that noted on the "SCREENING WALL DETAIL" on Sheet 1 of 6. The wall shall be constructed consistent with the "Specifications and Notes" noted on Sheet 6 of 6.
- 4. <u>Property Subdivision</u> The acreage on which the public utility, communications and transmission will be located shall be subdivided from the Property (Tax Map Number /79//////49A; PIN# 060-27-8493) prior to site plan approval. The subdivided parcel shall maintain a minimum size of 3.1 acres.

SPEX 2008-0044 & CMPT 2008-0015

NIVO Substation

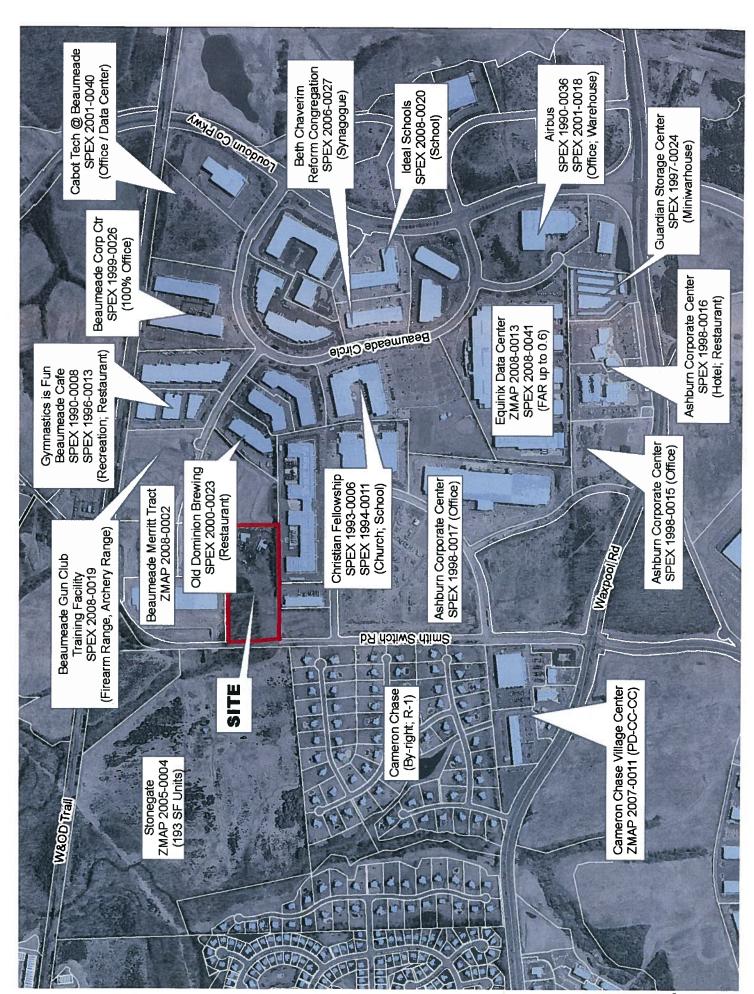
Committee of the Whole

June 11, 2009

5. **Exterior Lighting** – Any additional exterior lighting installed on the Property shall be full cutoff and fully shielded light fixtures as defined by the Illuminating Engineering Society of North America (IESNA). Light shall be directed inward and downward toward the interior of the property, away from nearby properties.

NOTE: The Applicant has agreed to a one-time contribution of \$3,500.00 for the public utility, communications and transmission for volunteer fire and rescue services. The \$3,500.00 contribution for the telecommunication structures and antennas will be paid to the County prior to issuance of the first zoning permit for the public utility, communications and transmission.

NOTE: The Applicant has indicated its intent to place underground all transmission lines connecting from the main power line at the W&OD Trail to the substation and from the substation to the intended users.



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Dominion Virginia Power 701 East Cary Street, Richmond, VA 23219 Mailing Address: P.O. Box 26666 Richmond, VA 23261

Web Address: www.dom.com

June 3, 2009

Chairman Peggy Maio and Members of the Loudoun County Planning Commission Loudoun County Department of Planning 1 Harrison Street. S.E., 3rd floor Leesburg, VA 20177-7700 DEGEOWE JUN 0 4 2009 PLANNING DEPARTMENT

RE: 21362 Smith Switch Road, Proposed NIVO Substation

Dear Chairman Maio and Planning Commissioners:

I am writing to update the Planning Commission on the steps that Dominion has taken in response to comments raised at the May 21, 2009 public hearing on the NIVO substation and the recent action of the State Corporation Commission in approving the underground 230 kV transmission line that will serve the proposed substation.

At the close of the May 21, 2009 public hearing, the Planning Commission asked Dominion to: 1) revise to the proposed Special Exception/Commission Permit plat to include specific dimensions of the proposed screening wall for the substation; and 2) work with community representatives to enhance screening of the proposed substation from Smith Switch Road.

Per the Planning Commission's request Dominion has revised and updated the Special Exception/Commission Permit plat to include specific dimensions of the proposed screening wall for the substation. Twelve (12) copies of the revised and update Special Exception/Commission Permit plat are enclosed for the Planning Commission's review.

Dominion and DuPont Fabros are also working with the community representatives to develop an enhanced screening plan for the substation from Smith Switch Road. A meeting between the parties was held on Tuesday, May 26, 2009 to discuss this screening. Dominion and DuPont are working with their architects to develop updated photosimulations of the proposed screening enhancements discussed at the May 26, 2009 meeting. An additional community meeting is scheduled for June 4, 2009 to discuss screening options. Dominion anticipates that the parties will be able to agree upon the screening enhancements and be able to present final updated photosimulations reflecting the proposed enhancement to the Planning Commission at its June 11, 2009 worksession.

Lastly, pursuant to a Final Order in case PUE-2008-0063, dated May 29, 2009, the State Corporation Commission has approved the 230 kV transmission line proposed between the Beaumeade substation and the NIVO substation as an underground transmission line along

the Smith Switch Road route. A copy of the Final Order is also attached for your convenience.

Should you have any concerns, please feel free to contact me at <a href="mailto:courtney.r.fisher@dom.com">courtney.r.fisher@dom.com</a> or 804-771-6408.

Sincerely,

Courtney R. Fisher

Sr. Siting and Permitting Specialist

Copy: Jeff Nein, Cooley Godward Kronish LLP

#### COMMONWEALTH OF VIRGINIA

# STATE CORPORATION COMMISSION

AT RICHMOND, MAY 29, 2009

200 MAY 29 PM 4: 22

JOCUMENT CONTROL

APPLICATION OF

VIRGINIA ELECTRIC AND POWER COMPANY

For approval and certification of Beaumeade-NIVO 230 kV Underground Transmission line and 230-34.5 kV NIVO Substation under Va. Code § 56-46.1 and the Utility Facilities Act, Va. Code § 56-265.1 et seq., and as a pilot project pursuant to HB 1319



## **FINAL ORDER**

On July 21, 2008, Virginia Electric and Power Company ("Dominion Virginia Power" or "Company") filed with the State Corporation Commission ("Commission") an application for a certificate of public convenience and necessity to construct and operate a double-circuit 230 kV underground transmission line and an associated substation in Loudoun County, Virginia. Prepared testimony, exhibits, copies of correspondence, and other material were attached to the application.

Dominion Virginia Power proposed to construct a double-circuit 230 kV underground transmission line approximately 0.71 mile long from the Company's Beaumeade Substation to a new 230-34.5 kV substation ("NIVO Substation") to be constructed on land owned by DuPont Fabros Technology, Inc. ("DuPont Fabros")(collectively, the "Project"). The proposed transmission line would be built primarily on a combination of existing Company right-of-way within the Washington & Old Dominion Railroad Regional Park ("W&OD Trail") and existing Virginia Department of Transportation ("VDOT") right-of-way along Smith Switch Road. The Company proposed that the line be built underground, as a pilot project authorized pursuant to

Chapter 799 of the 2008 Virginia Acts of Assembly (House Bill 1319, effective April 2, 2008, or "HB 1319").

The Company indicated that it has received a request from DuPont Fabros to serve additional load at its Ashburn Corporate Center complex ("ACC Complex") of datacenters located at Smith Switch Road and Chilum Place in Ashburn, Virginia. The Company stated that this large block of new load is best served by the construction of the proposed NIVO Substation rather than by construction of new distribution circuits originating from existing substations.

On August 20, 2008, the Commission issued an Order for Notice and Hearing ("Notice Order") that docketed the Application as Case No. PUE-2008-00063 and established the procedural schedule. The Company was required to provide public notice by September 22, 2008, and proof of notice by September 29, 2008. Respondents were instructed to file direct testimony and exhibits by November 17, 2008. The Commission Staff was instructed to review the Application and file a Staff Report summarizing its investigation by December 8, 2008. The Company was allowed to respond to Staff's Report and any testimony from Respondents by December 22, 2008. The public was invited to provide written comments by January 26, 2009.

A Notice of Participation as a Respondent was filed by Merritt Properties, LLC ("Merritt"), who filed the direct testimony of Michael Larkin on November 17, 2008. Merritt did not object to the need for the line nor the Company's proposal to place the line underground. Merritt noted that the alternate route for the line would bisect Merritt's property and requested that the Commission approve the Company's preferred route.

Pursuant to a ruling from the Hearing Examiner extending the deadline for the filing of the Staff Report, Staff filed its Report on December 18, 2008. Staff agreed with the Company that the line was needed, but expressed a preference for the alternate route, which was shorter and could be constructed at a lower cost to ratepayers. The Company filed its response to the Staff Report and Merritt's direct testimony on January 7, 2009.

On January 26, 2009, Hearing Examiner Michael D. Thomas held a public hearing, where the Commission heard testimony from one public witness and accepted evidence from the Company, Merritt and the Staff. On March 23, 2009, the Hearing Examiner entered a report that explained the procedural history of this case, summarized the record, analyzed the evidence and issues in this proceeding, and made certain findings and recommendations ("Hearing Examiner's Report").

The Hearing Examiner's Report included the following findings:

- (1) The Project is needed to meet the growing demand for electricity in the area around Ashburn, Virginia;
- (2) The Project will improve the reliability of the 230 kV transmission system and the distribution system in the area served by the Company's Beaumeade Substation;
- (3) The Proposed Route reasonably minimizes the environmental and other adverse impacts associated with the Project;
- (4) With the exception of its recommendation that Dominion Virginia Power coordinate with Loudoun County on issues pertaining to the alignment and natural resource impacts of the proposed transmission lines, the Company should comply with DEQ's recommendations to minimize the Project's environmental impact;
- (5) The Project will foster economic development by allowing DuPont Fabros and others in the area to expand their operations;
  - (6) The Project meets the criteria for an underground pilot project pursuant to HB 1319;

- (7) The Project does not require any prudent avoidance measures since electric transmission line electromagnetic fields do not represent a human health hazard; and
- (8) A certificate of public convenience and necessity should be issued to the Company to construct and operate the Project.<sup>1</sup>

The Company and Merritt filed responses to the Hearing Examiner's Report on April 13, 2009, generally supporting the findings of the Hearing Examiner.

NOW THE COMMISSION, having considered this matter, is of the opinion and finds that the public convenience and necessity require construction of the transmission line proposed in this proceeding, subject to the following findings and conditions.

## **Approval**

The statutory scheme governing the Company's Application is found in several chapters of Title 56 of the Code of Virginia ("Code"). Section 56-265.2 A of the Code provides that "[i]t shall be unlawful for any public utility to construct . . . facilities for use in public utility service . . . without first having obtained a certificate from the Commission that the public convenience and necessity require the exercise of such right or privilege."

Section 56-46.1 of the Code further directs the Commission to consider several factors when reviewing the Company's application. Subsection A of the statute provides that:

Whenever the Commission is required to approve the construction of any electrical utility facility, it shall give consideration to the effect of that facility on the environment and establish such conditions as may be desirable or necessary to minimize adverse environmental impact . . . . In every proceeding under this subsection, the Commission shall receive and give consideration to all reports that relate to the proposed facility by state agencies concerned with environmental protection; and if requested by any county or municipality in which the facility is proposed to be built,

<sup>&</sup>lt;sup>1</sup> Hearing Examiner's Report at 28.

to local comprehensive plans that have been adopted . . . . Additionally, the Commission (i) shall consider the effect of the proposed facility on economic development within the Commonwealth and (ii) shall consider any improvements in service reliability that may result from the construction of such facility.

Section 56-46.1 B of the Code further provides that: "[a]s a condition to approval the Commission shall determine that the line is needed and that the corridor or route the line is to follow will reasonably minimize adverse impact on the scenic assets, historic districts and environment of the area concerned."

The Code also requires the Commission to consider existing right-of-way easements when siting transmission lines. Section 56-46.1 C of the Code provides that "[i]n any hearing the public service company shall provide adequate evidence that existing rights-of-way cannot adequately serve the needs of the company." In addition, § 56-259 C of the Code provides that "[p]rior to acquiring any easement of right-of-way, public service corporations will consider the feasibility of locating such facilities on, over, or under existing easements of rights-of-way."

Finally, as noted above, Dominion Virginia Power requested approval to place the line underground as a pilot program authorized under HB 1319. In order to qualify as a pilot project under HB 1319, a project shall be qualified to be placed underground, in whole or in part, if it meets the three following criteria:

- An engineering analysis demonstrates that it is technically feasible to place the proposed line, in whole or in part, underground;
- 2. The estimated additional cost of placing the proposed line, in whole or in part, underground does not exceed 2.5 times the cost of placing the same line overhead, assuming accepted industry standards for undergrounding to ensure safety and reliability. If the public utility, the affected localities,

and the State Corporation Commission agree, a proposed underground line whose cost exceeds 2.5 times the cost of placing the line overhead may also be accepted into the pilot program; and

3. The governing body of each locality in which a portion of the proposed line will be placed underground indicates, by resolution, general community support for the line to be placed underground.

#### Need

The Hearing Examiner found that the line is necessary.<sup>2</sup> According to the Company, the Project is needed to meet the growth in demand for electricity necessitated by the expansion of DuPont Fabros' datacenters at its ACC Complex in Ashburn, Virginia, as well as to address reliability concerns at the Company's Beaumeade Substation.<sup>3</sup> Staff investigated and agrees that continued service to the ACC Complex requires construction of the transmission line.<sup>4</sup> The record in this case is uncontroverted that there is a need for the Company's proposed transmission line and substation. Accordingly, we accept the Hearing Examiner's finding that the Company has demonstrated a need for the project.

#### Economic Development and Service Reliability

The Hearing Examiner noted that the proposed transmission line is intended to allow expanded service to Dupont Fabros' ACC Complex in Loudoun County, and to prevent

<sup>&</sup>lt;sup>2</sup> Hearing Examiner's Report at 20.

<sup>&</sup>lt;sup>3</sup> Ex. No. 4 at 7; Ex. No. 6 at 1-2.

<sup>&</sup>lt;sup>4</sup> Ex. No. 15 at 10.

reliability problems at the Company's Beaumeade Substation.<sup>5</sup> As such, the Hearing Examiner concluded that the proposed transmission line will have a positive impact on service reliability and economic development in Virginia.<sup>6</sup> We accept the Hearing Examiner's finding that the project will enhance the reliability of the Company's service. We further find that the project will not adversely affect economic development and is necessary to allow ongoing economic development in the area to continue.

# Scenic Assets, Historic Districts, and Existing Rights-of-Way

The Hearing Examiner noted that the Company's proposed route is approximately 0.71 mile long, and all but approximately 0.18 mile of its length utilizes existing Company-owned right-of-way along the W&OD Trail and existing VDOT right-of-way along Smith Switch Road.<sup>7</sup> The Hearing Examiner further noted that the alternate route is approximately 0.33 mile, most of which (approximately 0.28 mile) would require the acquisition of a new 30-foot wide right-of-way through the middle of the Merritt Properties' Beaumeade Corporate Park.<sup>8</sup> We agree with the Hearing Examiner that the Company's proposal uses existing rights-of-way to the maximum extent feasible.

#### **Environmental Impact**

Under § 56-46.1 A and B of the Code, the Commission is required to consider the proposed transmission line's impact on the environment and to establish such conditions as may be desirable or necessary to minimize adverse environmental impact. The statute further

<sup>&</sup>lt;sup>5</sup> Hearing Examiner's Report at 1.

<sup>&</sup>lt;sup>6</sup> <u>Id</u>. at 20.

<sup>&</sup>lt;sup>7</sup> Id. at 10.

<sup>8 &</sup>lt;u>Id</u>.

provides that the Commission shall receive and give consideration to all reports that relate to the proposed facility by state agencies concerned with environmental protection.

In order to assist the Commission with its review of the environmental impact of the proposed transmission line, the DEQ filed its coordinated environmental review on October 30, 2008. In its Report, DEQ noted that the DEQ Office of Wetlands and Water Protection ("DEQ-OWWP") and the Department of Conservation and Recreation ("DCR") recommended the Alternate Route because it will result in fewer impacts to wetlands, create less land disturbance, protect the established vegetative buffer along the W&OD Trail, and limit impacts to recreational resources. The DEQ Report also included the following specific recommendations, regardless of the route selected:

- Follow DEQ recommendations to avoid and minimize direct, indirect, and temporary impacts to wetlands;
- Complete the wetlands delineation and confirmation process by the U.S.
   Army Corps of Engineers to determine the location, extent, and type of surface waters present;
- Reduce solid waste at the source, reuse it, and recycle it to the maximum extent practicable;
- Coordinate with DCR for updates to their Biotics database if a significant amount of time passes before the project is implemented;
- Coordinate with the Department of Forestry to protect trees that are not identified for removal from adverse effects of construction activities;

<sup>&</sup>lt;sup>9</sup> Ex. No. 14 at 5.

- Conduct a comprehensive architectural and archaeological survey, update
   existing information as necessary, and work closely with the Department of
   Historic Resources to avoid, reduce, and mitigate any negative impacts;
- Coordinate permits and road and transportation impacts with Loudoun County and VDOT's Northern Virginia District Office;
- Follow the principles and practices of pollution prevention to the maximum extent practicable;
- Limit the use of pesticides and herbicides to the extent practicable; and
- Coordinate with Loudoun County on issues pertaining to the alignment and natural resource impacts of the proposed transmission lines.<sup>10</sup>

The Company questioned the need for the final recommendation, which is not customary. As noted by the Hearing Examiner, the Commission generally determines the final route and it usually leaves the final engineering design to the Company's discretion. The Company stated that it has worked with and taken Loudoun County's concerns into consideration.

The Hearing Examiner concluded that the Company should not be required to coordinate with Loudoun County regarding the final alignment of the line, but should be required to comply with the remainder of DEQ's recommendations. 12

We agree with the Hearing Examiner that coordination with Loudoun County regarding final route alignment is not necessary in this case. We further find that, as a condition of our

<sup>&</sup>lt;sup>10</sup> Ex. No. 14 at 5-6.

<sup>11</sup> Hearing Examiner's Report at 27.

<sup>12</sup> Hearing Examiner's Report at 27.

approval, the Company will comply with all remaining DEQ recommendations, which we find necessary to minimize adverse environmental impact.

#### Alignment of the Proposed Transmission Line

The Hearing Examiner noted that the Company considered multiple routes for the transmission line as well as applicable generation alternatives. <sup>13</sup> Ultimately, the Company selected the Proposed Route because Beaumeade Substation and the proposed NIVO Substation are a relatively short distance from one another and there are existing rights-of-way within close proximity. <sup>14</sup> The Company stated that the Alternate Route was inferior because, while the Alternate Route is shorter and less expensive than the Proposed Route, the Alternate Route crosses the industrial park owned by Merritt, requires the acquisition of almost twice the amount of new right-of-way required for the Proposed Route, and the Proposed Route better follows FERC Guidelines. <sup>15</sup>

Staff investigated the Proposed and Alternate Routes, and concluded that the Alternate Route was preferable because it was shorter and could be constructed at a lower cost. Staff noted that DEQ also preferred the Alternate Route. 16

The Hearing Examiner noted that the shortest, least costly alternative is not always the best choice for routing a transmission line, and concluded that the Proposed Route, which requires acquisition of less new right-of-way and avoids economic impact to the Merritt

<sup>13</sup> Hearing Examiner's Report at 6, 10.

<sup>&</sup>lt;sup>14</sup> Ex. No. 9 at 3; Hearing Examiner's Report at 10.

<sup>&</sup>lt;sup>15</sup> Ex. No. 9 at 4.

<sup>&</sup>lt;sup>16</sup> Ex. No. 15 at 27.

property, is preferable to the Alternate Route.<sup>17</sup> We agree with the Hearing Examiner that the route proposed by the Company is superior to the alternatives.

#### HB 1319 Pilot Project

If the cost to ratepayers were the overriding concern in this proceeding, the proposed transmission line would be constructed overhead at a total cost of \$7.9 million. However, the Company has proposed to install the transmission line as an underground pilot project pursuant to HB 1319. Staff examined the proposed project under HB 1319, and concluded that the project qualifies as a pilot project, and that it will provide Dominion with additional experience regarding use of XLPE cable. The Hearing Examiner concluded that (1) it is technically feasible to construct the line underground; (2) the cost of installing the underground line is 1.3 times the cost of installing an overhead line; and (3) the governing body of Loudoun County has expressed its support for undergrounding the line. We agree with the Hearing Examiner that the Company's proposal complies with the requirements of HB 1319, and will approve construction of the line underground as a pilot project.

## **EMF**

Public Witness Kenneth Strong presented testimony regarding a potential impact upon childhood leukemia rates from extremely low frequency EMF emanated from nearby high voltage transmission lines. Company witness, Dr. Cole, testified that some early epidemiology studies showed a weak association between EMF and childhood leukemia, but later studies were

<sup>&</sup>lt;sup>17</sup> Hearing Examiner's Report at 25-26.

<sup>&</sup>lt;sup>18</sup> Ex. No. 15 at 8-9.

<sup>19</sup> Hearing Examiner's Report at 27.

either inconclusive or showed no relationship between EMF and childhood leukemia. The Hearing Examiner concluded that "the Project does not require any prudent avoidance measures since electric transmission line electromagnetic fields do not represent a human health hazard."<sup>20</sup> Based on the evidence, we do not believe the remedies requested by Mr. Strong are necessary.

### Accordingly, IT IS ORDERED THAT:

- (1) Dominion Virginia Power is authorized to construct and operate the proposed double-circuit 230 kV underground transmission line in Loudoun County, Virginia extending approximately 0.71 mile from Beaumeade Substation to the proposed NIVO 230-34.5 kV Substation, on the route proposed in the Company's Application. The Company is also authorized to construct and operate the proposed 230-34.5 kV NIVO Substation.
- (2) Pursuant to §§ 56-46.1, 56-265.2 and related provisions of Title 56 of the Code,

  Dominion Virginia Power's Application for a certificate of public convenience and necessity to

  construct and operate the proposed transmission line and substation is granted, as provided for

  herein, and subject to the requirements set forth in this Final Order.
- (3) Pursuant to the Utility Facilities Act, Chapter 10.1 (§§ 56-265.1 et seq.) of Title 56 of the Code, Dominion Virginia Power is issued the following certificate of public convenience and necessity:

Certificate No. ET-91r authorizes Virginia Electric and Power Company under the Utility Facilities Act to construct and operate the proposed Beaumeade-NIVO 230 kV transmission line and associated facilities as authorized in Case No. PUE-2008-00063; and to operate previously certificated transmission lines and facilities in Loudoun County, all as shown on the map attached to the certificate. Certificate No. ET-91r cancels Certificate No. ET-91q issued to Virginia Electric and Power Company on October 7, 2008 in Case No. PUE-2007-00031.

<sup>&</sup>lt;sup>20</sup> Hearing Examiner's Report at 28.

- (4) The Commission's Division of Energy Regulation shall forthwith provide the Company a copy of the certificate issued in Ordering Paragraph (3) above with the detailed map attached.
- (5) The Company is authorized to construct the transmission line as an underground pilot project pursuant to HB 1319.
- (6) The transmission line and associated substation approved herein must be constructed and in-service by April 1, 2010; however, the Company is granted leave to apply for an extension for good cause shown.
- (7) As there is nothing further to come before the Commission, this matter is dismissed and the papers herein placed in the file for ended causes.

Commissioner Dimitri did not participate in this matter.

AN ATTESTED COPY hereof shall be sent by the Clerk of the Commission to: Lisa S. Booth, Esquire, Dominion Resources Services, Inc., Law Department, P.O. Box 26532, Richmond, Virginia 23261; Kristian M. Dahl, Esquire, Vishwa B. Link, Esquire, and Jennifer D. Valaika, Esquire, McGuireWoods, LLP, One James Center, 901 East Cary Street, Richmond, Virginia 23219-4030; Brian R. Greene, Esquire, and Cullen Seltzer, Esquire, SeltzerGreene, PLC, 707 East Main Street, Suite 1025, Richmond, Virginia 23219; C. Meade Browder, Jr., Senior Assistant Attorney General, Division of Consumer Counsel, Office of the Attorney General, 900 East Main Street, 2nd Floor, Richmond, Virginia 23219; and the Commission's Office of General Counsel and Division of Energy Regulation.

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